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ABSTRACT

An operational description of the 1973-74 Buddy-Tutor Project at Hilo Intermediate School in Hilo, Hawaii and an evaluative assessment of its outcome with statistical treatment of the data is provided in this report. This project is an exploratory behavioral intervention program for educationally deprived students and focuses its efforts on the improvement of academic and school oriented behaviors. The tutor component of the project consists of the delivery of academic remedial services through the use of the peer tutoring strategy adopted from the Operation Tutor Project. The buddy component consists of the mediation and advocacy efforts of the project buddies to support and maintain student academic progress. The efforts involve buddy contacts with parents and teachers to create supportive conditions for learning, and the use of positive, nonacademic activities to motivate student learning. The project is successful in reaching its goals and attaining its objectives, and effective in helping the pupils to acquire social and academic behaviors which are essential for success in schools and the community. Academic improvement is shown most clearly in reading and mathematics skills, the tutored subjects. Improvement in attitudes toward the environment is also indicated. It is recommended that the project be continued with at least thirty weeks of consistent and well organized implementations. (Author/AM)

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FINAL REPORT

BUDDY-TUTOR PROJECT

Hilo Intermediate School
March - July, 1974

1973-74 ELEMENTARY & SECONDARY EDUCATION ACT - TITLE I

HAWAII DISTRICT OFFICE

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Department of Education
State of Hawaii

Teichiro Hirata
Superintendent of Education

Dr. Kiyoto Mizuba
Acting District Superintendent

Laurence Capellas
District ESEA Title I Coordinator

Robert Bean, Principal & Project Director
Hilo Intermediate School - Buddy-Tutor Project

This report was prepared by the:

SOCIAL WELFARE DEVELOPMENT & RESEARCH CENTER
University of Hawaii

Jack T. Nagoshi
Director

Robert T. Omura
Assistant Director & Principal Program Consultant

Report No. 136

September 1974

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PROJECT STAFF

Mercedes Manalili - Project Teacher
Patricia Grossman - Activities Coordinator (Part-time)

BUDDIES (Part-time)

Annette Biron**
Ann Borges
Elena Freeland**
Patricia Grossman
Anella Jose*
Kevin Kasparovitch*
Ivy Kualii**
Sandie Mahuna*
Trisia Narimatsu**
Piilani Navalta**
Karen Okihiro**
Valerie Porter**
Herbert Rosario*
Patricia Souza
Pamela Wilson
Donna Yamada**

* - Spring only
** - Summer only

FIELD CONSULTANT & BUDDY TRAINER

Dr. William R. Higa, Assistant Professor
Hilo College - University of Hawaii

EVALUATION MONITOR

David C. Swanson

This Report was prepared by Mr. Swanson with the assistance of Ms. Annette Biron - UHHC, edited by Dr. Higa

PREFACE

The 1973-74 Buddy-Tutor Project was located at Hilo Intermediate School in Hilo, Hawaii. Evaluation of this Elementary and Secondary Education Act (ESEA) Title I program is provided by the Social Welfare Development and Research Center (SWDRC), of the University of Hawaii, Manoa Campus. This report was prepared and submitted in accordance with the Memorandum of Agreement between the State of Hawaii Department of Education (DOE) and the University of Hawaii Social Welfare Development and Research Center (SWDRC).

The report provides an operational description of the program and an evaluative assessment of its outcomes (with statistical treatment of the data). For information on other features of the project (theoretical basis, program justification, needs assessment, and project budget), the reader is referred to the 1973-74 Buddy-Tutor Project Proposal.[1] For a preliminary assessment and progress report of the program, the reader is referred to the Buddy-Tutor Project, Progress Report No. 1.[2]

The administrative objective of the Buddy-Tutor Project was to integrate into one program the effective components of two other successful projects: Operation Tutor and Buddy System Project. Operation Tutor has been an ESEA Title I project operated by the Hawaii District of the DOE for the past three years. For descriptive and evaluative information on this project, see 1972-73 Evaluation of Project Components - Hawaii District Offices DOE - ESEA, Title 1.[3] The Buddy System Project has been a Honolulu Family Court Project supported by the Honolulu Model Cities agency for the past four years. For descriptive and evaluative information on this project, the reader is referred to The Honolulu Buddy System Project - 3rd Action Year, Annual Report; and Final Report.[4 & 5.]

The Buddy-Tutor Project was thus developed to incorporate the outstanding features of both efforts and to overcome the identified weaknesses of these original programs. In this sense therefore, the Buddy-Tutor Project was conceived,

implemented, and evaluated as an exploratory examination of an innovative educational alternative for the educationally deprived students of Hawaii's public secondary school system.

We wish to acknowledge the support and encouragement rendered by Dr. Kiyoto Mizuba and Laurence Capellas of the Hawaii District Office. Without their foresight and determination this project would not have been implemented. Recognition is also made of the able and competent leadership provided by Robert Bean, principal of Hilo Intermediate School. The mid-semester implementation of this project into the school routine would not have been possible without his counsel and coordination. Our special thanks is also given to Donald Manalili, Operation Tutor Coordinator for the Hawaii District ESEA Title I program, for his help and assistance provided to the project staff. The interest and cooperative spirit shown by the classroom teachers at Hilo Intermediate School also contributed to project success.

The SWDRC was very impressed throughout the duration of this Title I project with the evident dedication, motivation, and sincerity shown by the staff. Cooperation and active support of evaluation procedures were offered by the project teacher, activities coordinator, field consultant, and University of Hawaii students.

This report initially was drafted by David C. Swanson, Evaluation Specialist for the SWDRC, assisted by Annette Biron of Hilo College, and edited by Dr. William Higa, Assistant Professor of Psychology at Hilo College. This project was operated under the supervision of Robert T. Omura, Assistant Director of the SWDRC and principal program consultant to the project.

Jack T. Nagoshi, Director
Social Welfare Development & Research Center
University of Hawaii, Manoa Campus

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INTRODUCTION

The Buddy-Tutor Project was an exploratory, behavioral-intervention program for educationally deprived students at Hilo Intermediate School. The project, was supported by ESEA Title I funds and focused its efforts on the improvement of pupils' academic and school-oriented behaviors. The "Tutor" component of the project consisted of the delivery of academic remedial services through the use of the peer-tutoring strategy adopted from the Operation Tutor Project. The strategy involved individual diagnosis and instructional prescription by the project teacher, and instructional activities and interactions conducted by the tutor-tutee dyads. The "Buddy" component of the project consisted of the mediation and advocacy efforts of the project Buddies to support and maintain student academic progress. The efforts involved personal Buddy contacts with parents and teachers to create supportive conditions for learning, and the use of positive, non-academic activities (organized by the Project Activity Coordinator) to motivate student learning.

An Academic Resource Room (ARR) was established at Hilo Intermediate School from which the project teacher was able to provide academic services to the participating Title I pupils. After screening, testing, parental permission, and individual diagnosis, the pupils were matched according to their functioning abilities as tutor and/or tutee. This mutually helping, tutorial relationship of each dyad was supported by the diagnosis and prescription from the project teacher, supervision and social reinforcement from Buddies (University of Hawaii at Hilo undergraduates and former graduates), and consultation in intervention services from the University of Hawaii consultants.

The purpose of this exploratory project was thus to provide underachieving pupils with remedial work in reading and/or mathematics, to do so in a pleasant and comfortable learning environment, and to relate academic success to enjoyable,

rewarding experiences. The attempt was made to have parents become involved with their children's school-related activities, and for them to positively reinforce the participants' academic progress by praise and recognition.

The goals of the Buddy-Tutor Project at Hilo Intermediate School were (1) to help the pupils "acquire a basic repertoire of common behaviors necessary for academic and social success in school and the community," and (2) to improve the students' "academic skills in the areas of reading, computation, and language communication capabilities."

PROGRAM DEVELOPMENT & IMPLEMENTATION

The ESEA Title I Buddy-Tutor Project at Hilo Intermediate School was scheduled to serve its pupils throughout the second semester of the 1973-74 academic year. Beginning on January 28, the project was to continue for eighteen weeks and end on June 7, following the normal school calendar. However, due to technical and administrative delays within the Department of Education and various State offices, the project was not approved and did not begin until March 14, 1974 - or until 40% of the second semester had elapsed. The time lost by the delay in project approval was recaptured by an extension of the project into the Summer. That is, after the last day of regular classes, June 7, the Buddy-Tutor Project continued from June 10 through July 31, 1974.

While some preparation for the project had taken place prior to March 14 starting date, there was still much work to be accomplished at that time. The screening pretesting and final selection of Title I eligible pupils had to be completed and the official permission of parents for their children's participation had to be obtained. A classroom had to be established, with tables, chairs, desks, books, and instructional materials secured from throughout the school and community. Individual pupil schedules had to be arranged, communication with other teachers was required, and tutors needed to be trained. With the semester already seven weeks old, these sudden and new arrangements were difficult to implement quickly.

Meanwhile, several of the University of Hawaii students who had agreed to work as Buddies in the project became frustrated by the delay and left the program. Other Buddies were found and all were being trained (frequently at different stages of training) by the project consultant. As the Buddies were learning their roles, the classroom initially arranged, and pretesting

nearing completion, diagnosis and individual prescription could finally begin. It was not until after the Spring Recess (mid-April) that the project was functioning sufficiently well to permit the implementation of consistent Buddy-Tutor (or Buddy-Tutee) contracts. The lost time during the beginning of the semester was not able to be overcome.

PROGRAM DESCRIPTION: SPRING AND SUMMER SESSIONS

The administrative delay in project approval resulted in the operation of two versions of the Buddy-Tutor idea: a Spring project conducted during the regular school year and a Summer project conducted during a special summer session. Due to the nature of the Spring project (Spring, herein), i.e., it was a program operated during the regular school year under "normal" circumstance and the typical school routine, and could more readily be continued or replicated as such - the major emphasis of this evaluation was directed to that program. While the Summer project (Summer, herein) appeared to have been the more efficient, it was adopted and redesigned through the experiences encountered during the Spring, and could not have been developed without that initial experience.

The program characteristics generally common to both Spring and Summer included four aspects of the overall Buddy-Tutor Project. The emphasis given to each was slightly different between sessions, yet was fully typical of both. These common features consisted of MATCHING of Buddies and students, ACADEMIC INSTRUCTION, CONTINGENCY CONTRACTING, and COMMUNITY INVOLVEMENT.

Characteristics that were uncommon to both sessions included the student ENROLLMENT, SCHOOL DAY SCHEDULE, and PARENTAL INVOLVEMENT.

ENROLLMENT

A total of twenty-seven students were involved in the Spring while 40 youngsters participated in the Summer session. Among the forty Summer students, ten were carryovers from the Spring session. The remaining seventeen pupils of the Spring session were unable to continue in the Summer program for various reasons. (Reasons included: the parents of these students wanted their children at home, family vacations, work at home, transportation difficulties and due to disinterest among some ninth graders who had terminated their enrollment at Hilo Intermediate School.)

Although more than thirty Title I eligible pupils at Hilo Intermediate School had indicated a desire to enroll in the Summer session extension of the Buddy-Tutor project, the total enrollment was limited to 40 participants due to personnel and other logistical reasons. A total of fifty-seven different students were thus served by the project during the combined Spring and Summer programs.

SCHOOL DAY SCHEDULE

During the Spring, the students first reported to their regular classroom teachers (so as not to be considered absent, and to pick up and return homework and class assignments from them). The students then reported to the Academic Resource Room (ARR) at the same and specific time each day. The ARR was centrally located in one room near the school's main office and the participating students remained for one academic period (45 to 55 minutes) each day. Once there, the pupils met in tutorial dyads for fifteen or twenty minutes, met briefly with either the project teacher or their Buddies, worked on their homework or classwork, and - if the necessary work had been completed - relax in the high strength activity area by engaging in leisure activities of their choosing. (Before and after the one period in the ARR, the pupils reported to their regularly scheduled classes.)

During the Summer, the forty pupils occupied the original ARR and two other classrooms, and a section of the school's library. Every pupil reported for the entire three-hour day, 8:30 to 11:30 AM. There were no other classes or activities to go to, and no homework from the conventional classes. Due to the lack of regular classes or pupils within the school facility during the Summer, the space available was considerably more extensive. Use of this additional space was well utilized and efficiently organized.

MATCHING: BUDDIES & TUTORS

The "IAR" and "I-E" Scales were applied to all pupils and Buddies, respectively. Similar range or matching scores were paired among Buddies and the participating pupils, with those of similar scores forming a Buddy-Tutor pair. The two scales were short paper and pencil tests with separate forms for adults and students. The resulting scores measured the "internal-external" (I-E) locus of control, which implied that a person saw his or her behavior as either being self-determined - "coming from within", or determined by others - "coming from without." (These scales are a continuous dimension and measure a probable range of behavior, rather than a specific point within either of the internal or external categories.) The purpose of using these scales was to increase the likelihood that what was (internally vs. extrinsically) rewarding to the pupils was also recognized by the Buddy. Both Spring and Summer programs utilized such matching techniques.

ACADEMIC INSTRUCTION

A characteristic common to both Spring and Summer sessions was the emphasis on academic instruction. While the Summer project used a greater variety of materials (the program included 48% more pupils than did the Spring session), most instructional aids were present during both programs. For reading instruction these materials included: Ginn 360 Series, Reader's Digest Reading Skill Builder, Specific Skills Series, SRA Reading Laboratory, Reading For Understanding, Target Reading, and Reading For Concepts. For pupils working in mathematics the materials included: Essentials of Arithmetic, Arithmetic With Sets, Arithmetic in Use, Learning to Use Arithmetic, and Investigating Math. Various sets of math skill flash cards were also used frequently. With these materials generally available during both programs, still other instructional aids were occasionally utilized, including some teacher-made activities.

CONTINGENCY CONTRACTING

With the Buddies having been trained by the project consultant in the areas of behavior intervention and contingency contracting, specific intervention programs were established for each pupil during both sessions. Written contracts were developed and utilized to promote greater pupil motivation, clearer understanding of what work needed to be done, and for accuracy in measuring pupil achievement. Each of the Buddies and their designated tutors and tutees agreed to the nature and content of weekly contracts. As the amount and type of work and behaviors varied among the pupils, so did the individual contracts change from one week to the next. As the tutors and tutees achieved more, more achievement was expected from them. Their learning to read faster allowed them (and the contract to state) to read more. The average accuracy level required to satisfy the contracts rose from 61.7% at the beginning of the project to 86.6% at the end, while the high percentage of pupils who successfully completed their contracts varied slightly from the 93% average.

While the implementation of contingency contracting did not begin in the Spring until after the Spring vacation, both sessions used contracting for seven weeks. It was the Summer program, however, which was able to benefit from the experiences of the Spring, and its contracts with pupils were more systematic. Each Buddy made individual contracts with tutors and tutees to achieve specific behavioral objectives such as attendance, accuracy on academic tasks, and appropriate social interaction. During the Summer each contract was agreed to and signed by the tutor or tutee, the Buddy, and the parent. If, and only if, the contract was met did the pupil attend the scheduled high strength Friday activity.

Due to the considerable space available throughout the Summer, the pupils also earned (non-contracted) "free time activity" by completing their academic

work early enough in the period to be allowed to go to the high strength activity area located in another room. To pass from the first room into the second, their performance card had to be perforated by their respective Buddy. Having accomplished their academic tasks to a specified accuracy level, they played chess or checkers, made puzzles or did art work, read comics, used a typewriter, and so forth, all of which apparently, were enjoyable activities to them.

A similar high strength activity area was established during the Spring session although this was naturally limited to one corner of the classroom. While the procedure was not as systematic, pupils entered that area (similar to the high strength room during the Summer program) only when previously prescribed work had been completed with sufficient accuracy. There, too, the tutors and tutees involved themselves with activities which were especially rewarding to them. While the Summer project's activity area was larger and contained a greater variety of things to do, both sessions of the Buddy-Tutor Project made effective use of this behavioral management and motivation technique.

The contracting procedure established by both sessions was exclusively contingency contracting. Academic work that met the accuracy level satisfied the contracts and resulted in reinforcing events for them. Their participation in these events was contingent upon their completing the contracts. To determine what was sufficiently rewarding for the children (i.e., those events for which they would perform academic tasks), the most direct procedure was applied: they were asked. Several questionnaires were given to them at different times, on which they checked those activities they most preferred doing. Each succeeding questionnaire was more specific and realistic, having deleted those things which were apparently least reinforcing.

The first list contained approximately thirty items, allowing the pupils to select activities ranging from "singing" to "a car trip around the island."

Once the more reinforcing activities were determined, a schedule of events was established and presented to the pupils. To be allowed to make puzzles and read magazines they needed to complete their daily work, and to attend the weekly events they were required to complete their weekly contracts. (While the Spring project often had more than one event per week, these extra activities were usually of less reinforcing value. Major activities occurred on Fridays or Saturdays.)

Table 1 presents the date, activity, and the number of pupils who participated. All pupils attending the events completed their contracts, but not all who satisfied their contracts could always attend (due to personal or family reasons). To increase pupil motivation by making the choices of events more attractive, the Summer Buddy-Tutor project included alternative activities on various occasions. The pupils were able to select either the primary event or its alternative.

PARENTAL INVOLVEMENT

Due to the delay of program implementation and its resulting handicaps, the frustration felt by many Buddies limited their initial parental contacts during Spring. There were several additional reasons which contributed to this effect: the Buddies were involved in the program for considerably less time during Spring than Summer, they had more free time of their own (i.e., not taking University courses), and the parents appeared to be more receptive during Summer since it was an "unusual" program that did not follow the regular school calendar. Nevertheless, individual parental contacts were made during the Spring project, including two meetings and a potluck dinner highlighting group gatherings. The average number of parents attending these group meetings was five. Similar group meetings and a second dinner were held during the Summer, with average of parents being approximately 15. Individual contracts arranged by the Buddies between the project teacher and parents continued throughout the Summer.

Additional parental contact was effectively made during the Summer session by the more frequent use of individually written personal letters sent home to parents, and by certificates awarded to pupils meeting predetermined academic criteria. This use of positive feedback appeared to be as rewarding to the pupils as it was to their parents. The primary reasons that parents became more concerned and involved during the Summer appeared to be a combination of the positive influences from both the Buddies' personal contact and the project teacher's frequent communication with parents through notes, letters, and the certificates of accomplishment given to the pupils.

Table 1

BUDDY-TUTOR PROJECT ACTIVITIES

Date	Activity	Number of Participating Pupils
April 23, 1974	First Aid Basics	15
April 30	Oly beer can hats, Part I	8
May 4	Volcano excursion	6
May 7	Oly beer can hats, Part II	6
May 10	Interior Decoration	9
May 14	Lunch preparation meeting	10
May 16	Horsemanship demonstration	7
May 18	Waikoloa Horseback Riding	11
May 21	Lunch preparation	12
May 24	Sailing in Hilo Bay	8
May 30	Card Game Tournament	9
May 31-June 1	Overnight at Pohakuloa, Puako-Hapuna	10
June 4	Card Game Tournament	12
June 6	Pot Luck Dinner	7 (5)*
June 14	Awareness House Tour (Police Department tour & picnic)	6 12
June 21	Volcano Excursion (Swimming at Four Miles)**	13 5
June 28	Waiakea Village Tour and Lunch	26
July 5	Punaluu Trip and picnic (Lyman House Museum tour)**	19 4
July 12	Bowling at Hilo Lanes	22
July 19	Horseback Riding and picnic	23
July 26	Kona & Honaunau, and picnic (Sailing on the "Nanikai")**	17 5

*Parents in parentheses
**Alternative Activities in parentheses

Table 1 (cont.)

Date	Activity	Number of Participating Pupils
July 29	Bowling at Hilo Lanes	20
July 30	Pot Luck Dinner	22 (15)*

*Parents in parentheses
**Alternative Activities in parentheses

COMMUNITY INVOLVEMENT

The aspect of the Buddy-Tutor Project which both sessions shared equally was the extensive community involvement. The sincere and dedicated involvement with this project by the Hilo community - its agencies, organizations, and people - was outstandingly good and highly commendable. Without the services, resources, and competence of the Buddy-Tutor Project Activity Coordinator, the options, opportunities, and reinforcements for these children would not have been as great. Their motivation and academic achievement, in all liklihood, would have been less than it was. Listed below are the names of the people who voluntarily contributed their time and effort to the success of this Buddy-Tutor Project.

Hugh Grossman: donated and delivered the wooden carrels to the project; made the wooden trophies for the last potluck dinner awards presentatoon.

David Lyman (and Art Mercerau): captains of the catamaran which took the pupils sailing (twice) in Hilo Bay.

George Manos: was volunteer male chaperon to all cctivities.

George Mine: gave a lecture-demonstration on first aid basics.

Joseph Papalimu: volunteered his time and talent in providing a horsemanship demonstration.

George Purdy: manager of the Waikoloa stables - gave the Buddy-Tutor pupils special rates.

Flora Soloman: volunteered her time to show the pupils how to make Oly beer can hats (two different sessions).

The Staff of the Awareness House: tour and short lecture of the facilities.

Sergeants Jerry Meyer & Wayne Carvalho of the Hawaii County Police Department: tour and explanation of the police department.

Howard Nakamura, president, and Robert Bethea, Pat Englehart, Gail Forbes, Art Mercerau, officers, of the Mauna Kea Jaycees: for their cash contribution for the activities.

The extra activities were not only reinforcing to the pupils, for they provided the children with learning experiences which were significant to their general education. Appropriate social behaviors, effective interpersonal communication, cooperation, respect, and a greater awareness of the environment were all increased. These pupils' learning to interact effectively with their social environment may help to prevent their (possible) later delinquency. Among the new leisure activities which these pupils said they learned as participants of this project were horseback riding, bowling, playing chess, and handicraft work. Also listed by them as new activities were reading and mathematics, "activities" which - for many of them - were first applied to such things as bowling and playing chess.

LEARNING PRO-SOCIAL BEHAVIORS: POSITIVE IDENTITY

Social behaviors, similar to academic skills must be learned, and learning appropriate social skills results in less anti-social behavior later.

The behavioral intervention and classroom management features of the Buddy-Tutor Project, however, included more than the issuing and completing of token rewards and contingency contracts. The ARR was well arranged with positive achievement reinforcers for appropriate pupil activity. The reading of books, for instance, was progressively recorded on a decorative "railroad track" mounted on the walls - encircling the room. "Railroad stations" were spotted at various points along the track. By reading books, the student was able to proceed from the beginning of the track and "arrived" at a "station" on various intervals to receive special privileges or activities not available to non-participating students.

If the tutors or tutees finished their assigned work, and achieved the necessary accuracy level, they were permitted to enter the high strength activity area for the remainder of the instructional period and engage in leisure-enrichment activities of their choice.

In an attempt to minimize the negative stigma (i.e., "a special class for slow learners," "a class for mentals," "room for dummies," etc.), a "Buddy-Tutor Club" was formed. During the Spring session outsiders - non-Title I students of the school - were not allowed to come into the room, but during lunch and before and after school the "club members" could return to the classroom to watch movies, play chess, read comics, make puzzles, and so forth. Much of the negative attitude commonly associated with "special classes" was turned into a positive association by this behavioral technique. The children were no longer "slow learners," but "select members."

Positive social reinforcement of appropriate pupil behavior was also prevalent. The Buddies and project teacher rewarded good behavior, successful academic achievement, and improved study habits by offering smiles, "thank you's," praise, personal attention, and social recognition. Similar reinforcement was given to parents when they became more involved with their child's academic achievements, and when their children improved. Informative and "congratulatory" letters were sent home to parents. When special improvement was shown by the child (such as consistent attendance) the Buddy usually telephoned the parent and expressed appreciation for their child's performance and their positive influence and concern for the child's education.

Of the behavioral intervention and learning theory techniques used within the classroom, however, the direct social reinforcement of immediate and desirable pupil behavior was the least consistent. Such behaviors as sitting idly, not paying attention, or not attending class were frequently rewarded by the Buddies' personal attention. When more desirable behaviors occurred (e.g., the pupil sitting quietly and working diligently), the Buddies tended not to intervene - either during or immediately afterward - and the pupil was not positively reinforced for the work accomplished. Such instances, however, were relatively few, and as the weeks passed the Buddies began to understand what they were doing, and thereby changed their own behavior.

Despite the fact that nearly all the Buddies were females and most of the participating students males between the ages of twelve and fifteen years, the established friendships and personal relationships between the Buddies and students were highly compatible. Numerous pairs of Buddies and pupils developed positive, and what could be, enduring relationships between them.

RESULTS

PUPIL AND PARENT ASSESSMENT

From a questionnaire sent to the children's parents by the project teacher it was learned that 74% of them thought that their child's behavior had improved during the Summer session. Twenty-six percent of them felt that the child's behavior had not changed during the course of the seven-week Summer program. Similarly, all except one of them (97%) stated that the Buddy-Tutor program was "excellent," with the one exception considering it to be a "good" project for their child. From a questionnaire given to the Summer session pupils at the end of the project it was learned that approximately 80% of them felt that the program was either "good" or "excellent." An equal number of children expressed the opinion that they had "increased their understanding in mathematics and readings."

CHANGES IN REPORT CARD GRADES

Table 2 presents the number of "F" and "D" grades which the typical pupil averaged during the first and second semester of the 1973-74 school year. Since the "F" and "D" grades were similar in number, no distinction was made between them in this table. Data from the "control" group (non-Title I) refer to the twenty-one pupils who were initially screened, pre-tested, and selected to be in the project but were not included (due to lack of parental permission). Although Title I eligible, these control group children were generally more successful in school prior to the program than were the participating Title I children since selection priority was based upon the "lowest achieving" pupils.

Data from Table 2 indicate that both groups of children received more "F" and "D" grades from their classroom teachers during the second semester than during the first. Their achievement, as estimated by these teachers,

Table 2

NUMBER OF "F" AND "D" GRADES PER PUPIL

	Non-Title I (N=21)		Title I Spring Sem. (N=22)	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
English	.2	.5	.4	.6
Social Studies	.4	.6	.5	.7
Mathematics	.7	.5	.3	.5
All classes	2.3	3.0	2.5	3.2

worsened during the school year. A chi square test showed no significant difference between the two groups of children ($p=.05$, $x^2=1.60$, $df=3$), or between first and second semester ($p=.05$, $x^2=.914$, $df=3$).

Data from this table, furthermore, must be accepted with extreme caution for two reasons. First, letter grades tend to be subjective in nature, fluctuating up and down according to the pupil's apparent work, the subject area, and the teacher. Secondly, letter grades issued by classroom teachers seldom reflect the immediate input of remediation, and this was especially true for this project since it began almost two months after the second semester had started. The project, at most, could have had only a 60% influence (relative to the length of time) on the children's entire semester's work. Furthermore, it was reported that at least one teacher expected even more work from Title I pupils because they were in the project, and therefore "graded" according to this new and higher standard.

Table 3

TITLE I & NON-TITLE I ATTENDANCE RATES

	Controls (n=21)	Experimentals	
		Spring Session (n=22)	Summer Session (n=34)
Percent of Attendance During Project	93	89	92
Percent of Attendance Prior to Project	94	94	92
Percent of Improved Attendance	-01	-05	00

ATTENDANCE RATES

The third table shows the attendance rates of the twenty-one controls, the twenty-two pupils in the Spring session, and the thirty-four students of the Summer Buddy-Tutor program. The data was compared by using chi square ($p = .05$, $x^2 = .01$, $df = 2$) and no significant difference was found. The "Percent of Attendance During Project" was determined by adding the number of days each child attended school after he/she was admitted to the project, and dividing that figure by the total number of school days that the individual could have attended. The "Percent of Attendance Prior to Project" was calculated to measure the percent of days which the typical child attended school from September 5, 1973, to the time he/she was admitted to the project.

These percentage figures follow the normal and expected pattern. The Summer pupils enjoyed the project sufficiently well to maintain a relatively high attendance rate. The typical pupil was absent less than three days throughout the seven weeks of the program. The control group's attendance rate decreased during the Spring, although these pupils were not involved

with the project itself. After a frustrating and underachieving school year (receiving three "F" or "D" grades each), a drop in attendance by at least one percent was not unusual. Neither was the five percent decline in attendance by Spring pupils unusual. Being taken out of "normal" classes, attending a "different" class, within a special room and with unique materials, some pupils may have felt uncomfortable or embarrassed by this suddenly different routine. Such a change may have been difficult for them to explain to their peers, as well as understand themselves. Occasionally avoiding this difficult situation, their average attendance rate declined by five percent - a phenomenon almost universally true of all Title I projects.

ENVIRONMENTAL INFLUENCE SCALE

The data from pre- and post-administration of the Environmental Influence Scale (EIS) is shown in Table 4. The EIS is a 24-item interview instrument with three categories (family, school, social) designed to assess the social environment of the youngster.[6] A high score in any of the EIS categories tends to indicate that the individual's environmental influence is positive.

The gain made on the school category by the Summer group was statistically significant ($p=.05$, $t=3.33$, $df=20$). The average child could relate better to the school environment at the end of the project than at its beginning, by an increased score of 22%. This increase reflects the positive influence which the Summer project had upon the participating children.

In regard to the Spring group, the increased scores averaged 17% for the school category, and 8% for the total score. These increases indicate that the pupils' environmental influence was positive and they could relate to it in a beneficial way. Gains made by these pupils were statistically significant for both the school category ($p=.05$, $t=2.07$, $df=16$) and the total

Table 4

EIS (TOTAL SCORE)

	Family	School	Social	Total
Spring (n=18)				
Pre	204	106	177	487
Post	215	124	186	525
Increase	5%	17%	5%	8%
Summer (n=20)				
Pre	225	135	209	569
Post	235	165	217	616
Increase	4%	22%	4%	8%

score ($p=.05$, $t=1.91$, $df=16$). The other two scores also increased but were not significant. The data suggests that while the Buddies' intervention succeeded in improving the pupils' attitude to the family and society, the combination of their influence within the classroom was the most effective.

ACADEMIC ACHIEVEMENT

The Peabody Individual Achievement Test (PIAT) was administered to each pupil who was screened for possible acceptance into the Buddy-Tutor Project. Twenty-one pupils were pretested but not included in the project, while twenty-seven were pretested for the Spring session, and forty for the Summer. The twenty-one pupils who were not in the project were all posttested in late May, 1974. Of the twenty-seven Spring session pupils, twenty-two were able to be posttested; and of the forty Summer children, thirty-four were also posttested. Those pupils not retested had left the program either during or shortly before it was concluded (due to illness, families going on vacation, or their simply not coming to class during the last few days of school).

Administration of the PIAT was chosen because it provides a wide-range measure of achievement in the areas of mathematics, reading, spelling, and general information. It is also an individually administered test, well standardized nationally, and has a test-retest reliability of .78. As with any test, raw scores fluctuate according to the number of test items and the ability of the individuals being tested. Raw scores, by themselves, cannot be meaningfully interpreted. The PIAT provides four types of scores which are derived from the pupils' raw scores during the time of test standardization. These derived scores are 1) grade equivalents, 2) age equivalents, 3) percentile ranks, and 4) standard scores.

> The SWDRC elected to use grade equivalent scores, as these are the most familiar to teachers, more readily understood by educators, and least subject to statistical misinterpretation. While using grade equivalent scores as the basis of statistical evaluation, the tabled data further minimized possible misunderstanding by emphasizing the gains achieved. The actual grade levels the pupils were in and their grade equivalent scores would, like raw scores, fluctuate among pupils, and therefore be more difficult to compare or understand. It cannot be determined, in other words, whether an eighth grader with a 6.5 grade equivalent score achieved more or less than a seventh grader with a 6.3 grade equivalent score. Only the differences between the pre- and post-test scores (i.e., gains) can give this information.[7]

There were three major handicaps which inhibited fully accurate statistical evaluation of the academic achievement gained through the Buddy-Tutor Project. Since evaluation is not a process of proving, but of helping to improve, its primary purpose is to determine reliable information from empirical, objective, quantitative, and behavioral data. To measure a pupil's performance, under such circumstances, the initial process of evaluation is to isolate the factors which contributed to his change in performance. Unless it can be established why or how the apparent learning occurred, the data alone can be of no relevant value. The PIAT test data from the Buddy-Tutor Project was less reliable than it could have been, and less applicable to precise evaluation than was initially planned.

The first major handicap which limited more accurate statistical analysis was due to the seven-week delay in program implementation. The project was therefore extended into the Summer. Of the twenty-seven pupils in the Spring session, seventeen left the project and ten continued with it throughout the Summer. To effectively isolate the influence which the Spring session had upon its pupils, most of the children would have had to be posttested in May. Twelve of the children were posttested at that time, with the ten pupils continuing in the project not being tested. Such testing of these pupils, however, would not have produced reliable data at that time. Data resulting from pretest administration in March, posttest administration in May, with the same data used as pretest scores in June, and then posttest administration in July - is not a statistically sound procedure. As these ten pupils were in both the Spring and Summer, and originally selected for the Spring project, these pupils' test scores have been included in the Spring as well as the Summer data.

A second barrier to more accurate evaluation of test data was that 20% of the control group pupils were <u>in fact</u> Title I pupils involved in the Operation Tutor project at Hilo Intermediate School. Again, isolation of the comparative effect which the Buddy-Tutor program had upon its pupils was diminished. Further, to keep the comparison group as large as possible, these pupils' test data were included since the influence which the Operation Tutor project at Hilo Intermediate School appeared to have had upon these children was relatively small.

The third and most significant handicap to accurate statistical analysis was entirely due to the delay in beginning the project, with the length of time between pre- and post-testing being much too short. The number of months between the two test administrations averaged less than three, with the twenty-four <u>Summer only</u> pupils being tested and retested within one and

seven-tenths months. The control pupils were pre- and post-tested within slightly more than three months. This short length of time between testing resulted in considerable test error. If the project had been implemented at the beginning of the second semester, with pretesting completed just prior to it, the difference between pre- and post-test administrations would have been approximately five months. Had it been possible to retain all Spring pupils throughout the Summer, this negative effective would also have been reduced somewhat. Even five months, however, is the minimum duration of time that should ever expire between testing periods.

The data presented in most tables which follow indicate only indirectly the functional abilities of the pupils at the beginning of the project and their abilities at its end. The significance of evaluation was based on the gains or losses attained by the pupils during the project. The data of grade equivalent scores have therefore been refined into <u>average monthly gains</u>. The average gain per month was established by subtracting the pretest score from the posttest score, and dividing this by the number of months between pre- and posttesting. In doing this, the nearest tenth of a month was recorded to ascertain the precise length of time each pupil was involved in the project. The average monthly gains in grade equivalent scores, or "intervention learning rate" in the tables, is the average score of the pupils.

The data in Table 5 presents the number of pupils who were both pre- and post-tested. All subsequent data pertain only to these pupils who were tested twice.* There were approximately 40% more males than females involved in all three groups, which is typical of most Title I projects. There were more tutors than tutees who were tested twice, but the actual ratio of tutor to tutee did not vary to the extent implied by the tabled data. Three tutees, for example, were not able to be posttested during the Spring session, and

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*Since the control group pupils were not involved in the project, they were not designated as either tutor or tutee.

Table 5

NUMBER OF PUPILS TESTED WITH THE PEABODY INDIVIDUAL ACHIEVEMENT TEST

	Control	Experimentals	
		Spring	Summer
Total Pupils:	21	22	34
Pupils by Sex			
Male:	16	15	24
Female:	5	7	10
Pupils by Role			
Tutor:	--	14	20
Tutee:	--	8	14
Pupils by Grade			
7th Grade:	6	9	16
8th grade:	4	6	12
9th Grade:	11	7	6

their data could not be recorded. A few tutees also had two tutors, each more knowledgable in either reading or mathematics. This arrangement, although rare, was necessary for the Spring due to the complexity of pupil abilities and their daily schedules of classes.

Table 6 presents the data obtained through pre-post administration of the PIAT. The controls', Spring and Summer results, are indicated from left to right. Overall evaluation of the data requires further analysis of the pre-post results which is presented in the next table. The baseline and intervention learning rates, and the differences between them is presented in Table 7.

The data, Average Monthly Gains in Grade Equivalent Scores, which represents the learning rate increase, is more significant than those presented on Table 6. While the baseline learning rate represents the rate of learning

(by average monthly gain) of the pupils before the project began, and the intervention learning rate shows the rate of gain achieved (monthly) during the project, the difference between them is critical. Achieving above .10 per month during the project, for example, would be an improvement only if the pupil was achieving less before it began. In the tutored subject areas - MATHEMATICS and READING, the Spring and Summer pupils achieved considerably more than did the controls.

The READING COMPREHENSION subtest results for all groups appear to be unreasonably high and the differences between groups are not statistically significant (refer back to Table 6 for significance). Such scores were probably due to chance factors, and their interrelationship cannot be meaningfully interpreted.

Achievement in SPELLING by both Spring and Summer sessions was very poor, although some of the reason for these scores was undoubtedly due to chance. Without more accurate measurement of the test data, and due to the conflicting influences within groups, this information cannot be reliably evaluated.

The "error" factors in the GENERAL INFORMATION subtest data appear to have resulted in scores which are unusually high and unable to be meaningfully interpreted. While the learning rate increases for both control group pupils and the Spring session pupils were near equal, the learning activity which occurred cannot be accountable for the extraordinary gains. "Lucky guesses" were apparently equal within both control and Spring groups.

The TOTAL SCORE differences between pre- and post-test scores are, except for the Summer session, statistically significant. The TOTAL SCORE, however, is by necessity not fully equivalent to an overall gain. Standardization of norms for the TOTAL SCORE, which is an interval measurement, required the

Table 6

ANALYSIS OF PRE-POST RESULTS FROM PIAT

Subtest		Controls	Experimentals	
			Spring	Summer
Mathematics:	Pre	5.5	5.5	5.7
	Post	5.9	6.2	5.9
	±	.4	.7	.2
	p. >	.05	.05	.05
	t		2.06	
	df		21	
Reading Recognition:	Pre	5.9	5.1	5.4
	Post	6.5	6.4	6.2
	±	.6	1.3	.8
	p. >	.05	.05	.05
	t	2.04	3.06	3.00
	df	20	21	23
Reading Comprehension:	Pre	5.0	4.3	4.8
	Post	5.7	5.2	5.4
	±	.7	.9	.6
	p. >	.05	.05	.05
	t	2.87	2.14	2.95
	df	20	21	23
Spelling:	Pre	5.5	5.2	5.3
	Post	6.3	5.5	5.1
	±	.8	.3	- .2
	p. >	.05	.05	.05
	t	2.57		
	df	20		
General Information:	Pre	5.3	4.8	5.1
	Post	6.2	5.7	5.5
	±	.9	.9	.4
	p. >	.05	.05	.05
	t	4.14	2.83	
	df	20	21	
Total Score:	Pre	5.2	4.8	5.1
	Post	6.1	5.6	5.3
	±	.9	.8	.2
	p. >	.05	.05	.05
	t	5.79	3.55	
	df	20	21	

Table 7

AVERAGE MONTHLY GAINS IN GRADE EQUIVALENT SCORES

Subtest		Controls	Experimentals	
			Spring	Summer
Mathematics:	Baseline	.07	.07	.07
	Intervention	.14	.25	.16
	Increase	.07	.18	.09
Reading Recognition:	Baseline	.07	.06	.07
	Intervention	.15	.27	.28
	Increase	.08	.21	.21
Reading Comprehension:	Baseline	.06	.06	.06
	Intervention	.27	.24	.25
	Increase	.21	.18	.19
Spelling:	Baseline	.07	.07	.07
	Intervention	.19	.07	-.10
	Increase	.12	0	-.17
General Information:	Baseline	.07	.06	.07
	Intervention	.28	.26	.14
	Increase	.21	.20	.07
Total Score:	Baseline	.07	.06	.07
	Intervention	.23	.19	.08
	Increase	.16	.13	.01

"skipping" of a decimal figure in approximately one third of the grade equivalent scores. (See Appendix B of the PIAT manual for examples.)

The Spring Buddy-Tutor learning rates by subgroups of pupils is indicated in Table 8. Similar learning rates, by PIAT subtest, are shown in Table 9. All learning rates imply "intervention" learning rates, i.e., the learning rates achieved during the project, or the average monthly gains in grade equivalent scores obtained by pupils participating in the project. These scores, although enlarged by test familiarity and "lucky" guesses, do show a trend. Male pupils tended to achieve more than females, tutors more than tutees, and ninth graders more than seventh or eighth graders.

The pupils involved in the Buddy-Tutor Project also achieved considerably more than the control group pupils in the tutored subjects. While the non-Title I (control) pupils' gains in other subtests tended to be above those of the Buddy-Tutor pupils, they were not (except for spelling) more than a few hundredths of a point higher. The greater achievement in reading and mathematics was made by the tutors and tutees.

Tables 10 and 11 present the baseline and intervention learning rates of the subgroups and subtests, respectively, achieved by the pupils of the Spring session and the control group. Also included, and of primary significance, are the differences between the baseline and intervention rates.

The final table of data, Table 12 contrasts these baseline-intervention rate differences, with the control group's scores being subtracted from the Buddy-Tutor Spring session's. Like Table 10, data from the subgroups refers only to the average gains from the READING RECOGNITION and READING COMPREHENSION subtests. The Buddy-Tutor pupils achieved more than did the control group in MATHEMATICS and READING RECOGNITION (tutored subjects), yet somewhat less on other subtests. No Buddy-Tutor subgroup attained less than the control

Table 8

SPRING SESSION LEARNING RATES BY SUBGROUPS
AVERAGE MONTHLY GAIN IN GRADE EQUIVALENT SCORES*

Category	Math	R.R.	R.C.	Spell.	G.I.	Total Score
Total: (n=22)	.25	.27	.24	.07	.26	.19
Gain by Sexes						
Male:	.27	.21	.31	.08	.31	.23
Female:	.09	.38	.11	.03	.14	.11
Gain by Role						
Tutor:	.22	.29	.29	.09	.31	.23
Tutee:	.21	.23	.16	.07	.17	.13
Gain by Grade						
7th Grade:	.17	.18	.08	.04	.16	.10
8th Grade:	.09	.48	.24	.13	.12	.12
9th Grade:	.38	.21	.45	.05	.50	.36

*Math. = Mathematics Subtest, R.R. = Reading Recognition, R. C. = Reading Comprehension, Spell. = Spelling, G.I. = General Information.

Table 9

TITLE I & NON-TITLE I LEARNING RATES BY SUBTESTS
AVERAGE MONTHLY GAIN IN GRADE EQUIVALENT SCORES

Subtest	Controls	Experimentals	
		Spring	Summer
Mathematics	.14	.25	.16
Reading Recognition	.15	.27	.28
Reading Comprehension	.27	.24	.25
Spelling	.19	.07	-.10
General Information	.28	.26	.14
Total Score	.23	.19	.08

Table 10

BASELINE & INTERVENTION LEARNING RATES IN READING*
OF NON-TITLE I & SPRING SESSION PUPILS

	CONTROLS (n=21)			EXPERIMENTALS - Spring (n=22)		
	Baseline	Intervention	Difference	Baseline	Intervention	Difference
Male	.07	.23	.16	.06	.26	.20
Female	.07	.16	.09	.07	.25	.18
7th Grade	.08	.15	.07	.06	.13	.07
8th Grade	.07	.28	.21	.06	.36	.30
9th Grade	.06	.23	.17	.06	.33	.27
TOTAL	.07	.21	.14	.06	.26	.20

*Gains represent the average scores of the Reading Recognition and Reading Comprehension Subtests.

Table 11

BASELINE & INTERVENTION LEARNING RATES BY SUBTEST
OF NON-TITLE I & SPRING SESSION PUPILS

	CONTROLS (n=21)			EXPERIMENTALS - Spring (n=22)		
	Baseline	Intervention	Difference	Baseline	Intervention	Difference
Mathematics	.07	.14	.07	.07	.25	.18
Reading Recognition	.07	.15	.08	.06	.27	.21
Reading Comprehension	.06	.27	.21	.06	.24	.18
Spelling	.07	.19	.12	.07	.07	0
General Information	.07	.28	.21	.06	.26	.20
TOTAL SCORE	.07	.23	.16	.06	.19	.13

Table 12

TITLE I & NON-TITLE I AVERAGE MONTHLY
GAINS BEYOND BASELINE RATE*

Baseline-Intervention Learning Rate Difference			
	Controls	Experimental Spring	Difference
Male	.16	.20	+.04
Female	.09	.18	+.09
7th Grade	.07	.07	0
8th Grade	.21	.30	+.09
9th Grade	.17	.27	+.10
Total	.14	.20	+.06
Mathematics	.07	.18	+.11
Reading Recognition	.08	.21	+.13
Reading Comprehension	.21	.18	-.03
Spelling	.12	0	-.12
General Information	.21	.20	-.01
Total Score	.16	.13	-.03

*Male, Female, 7th, 8th, & 9th Grade & Total gains represent the average scores of the Reading Recognition & Reading Comprehension Subtests

group pupils in reading achievement, with all except the seventh graders surpassing them. The gains within the tutored subjects suggest (and are supported by the statistically significant results from the Environmental Influence Scale) that the Buddy-Tutor Project achieved its primary objective of academic remediation for its pupils. Its success with helping pupils to learn appropriate social behaviors was of equal value to the long-term educational development of these children.

CONCLUSION

The Buddy-Tutor Project at Hilo Intermediate School was successful in reaching its goals and attaining its objectives. Directed by a dedicated and competent staff, it was effective in helping the pupils to acquire appropriate social and academic behaviors which are necessary for success in school and the community. By using positive social reinforcement, contingency contracting, and an individualized-tutorial approach to instruction, the project's pupils demonstrated a rapidly increased rate of learning in the tutored subjects. Academic improvement was shown most clearly in reading and mathematic skills, the tutored subjects. The pre- and post-tests gains in reading were larger than for any other PIAT subtest, and statistically significant for both the Spring and Summer sessions. Gains in mathematics and general information during the Spring project were also large and not likely due to chance.

The last table of data most clearly indicates that for mathematics and reading recognition, on which the pupils were tutored, the Title I students learned at a considerably faster rate than did pupils not receiving the extra remedial help. These Buddy-Tutor tutors and tutees also improved their attitudes, and significantly so, toward the environment around them. All scores of the Environmental Influence Scale increased and reflect more positive attitudes by the pupils at the end of the project than at its beginning. The higher scores shown in the school-oriented section of the scale indicate more positive attitudes had been developed by the pupils regarding their school experiences. This improved attitude was a measure of the pupils' improved behavior, and the change was not due to chance - but to the influence which this project had upon its members.

The dedication, effort, and success of the project staff are commendable. Facing difficult handicaps, the project was yet innovative. Working with approximately 60 pupils, their parents, and classroom teachers, the staff of eleven were remarkably organized and efficient. Cooperation and communication with the SWDRC were excellent, and all four recommendations in the Buddy-Tutor Project Progress Report were implemented. More frequent contact with parents was made (both personal and through letters sent home), more direct association of the reinforcing events to the pupils' work was provided by use of contingency contracting, a more systematic and consistent procedure of "reinforcing events" was established with the high strength activity area, and four private study carrels were added to the classroom.

It was unfortunate, and detrimental to the program's success, that implementation of the Buddy-Tutor Project was delayed by almost two months. The test scores were not, for that reason, as reliable as they might have been, and precise data analysis was not possible. The effect of IAR-IE (pupil to Buddy) matching, for example, could not be determined due to the lack of precision in test scores. While the testing procedures were accurate, and the PIAT test was the most applicable, the length of time between pre- and posttesting was much too short. The project's two sessions were too dissimilar, and involved too many different pupils, to allow one pre-post assessment to be feasible. The complexity of this program required at least two full and uninterrupted academic semester, during which time the implementation of teaching and behavioral strategies would remain consistent. Accurate measurement of program effectiveness necessitates a greater duration of time than this project was allowed, and only by carefully examining the trends of academic achievement could a fundamental assessment be made.

It is recommended that the Buddy-Tutor Project be continued with at least thirty weeks of consistent and well organized implementation. The experiences of the staff and the knowledge they gained by this project should be further developed and incorporated within a continued program. While the success, effectiveness, and value to the pupils of this Buddy-Tutor Project were significant, and the program met its goals and objectives, future programs would be likely to attain even more success. The utilization of individualized instruction, positive reinforcement, and the peer-tutoring approach to education - and eliciting the personal concern of parents for their child's educational and social development - should be continued and further expanded. The value of such implementation has been demonstrated by the Buddy-Tutor Project at Hilo Intermediate School.

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APPENDIX

PROJECT TASKS FOR BUDDIES

1. Successfully complete buddy training program.

2. Administer Buddy System Questionnaire and Environmental Influence Scale to assigned youngsters.

3. Establish contact with youngsters
   a. develop rapport
   b. explain project

4. Establish contact with parents
   a. develop rapport
   b. explain project, especially contracting process
   c. establish regular communication system

5. Develop written contracts with youngsters
   a. develop four 2-week contracts beginning June 10
   b. monitor contract progress
   c. deliver contract reinforcers

6. Develop and maintain regular feedback system with parents
   a. daily progress reports
   b. weekly home visits

7. Assist project teacher in management of academic activities

8. Assist activities coordinator in supervision of "recreational" activities

9. Attend weekly project meetings

BUDDY SCHEDULE OF TIME COMMITMENTS

	TIME	TASK	SUPERVISOR
1.	Two hours daily, M-F 8:00-12:00	Assist in carrying out academic & recreational activities	project teacher & activities coordinator
2.	Four hours, Fri. noon, Sat., or Sun.	Supervise recreational activities	activities coordinator
3.	Two hours, weekly	Project meeting	project consultant

BUDDY-TUTOR PROJECT

BUDDY: _____
WEEK: _____

BUDDY REPORT FORM

A. TASKS ON TARGETS

	Target 1	Target 2	Target 3	Target 4
1. Write contract				
2. Progress Checks				
3. Manage Payoff				
4. Other				

B. TASKS ON PARENTS

	Parent 1	Parent 2	Parent 3	Parent 4
1. Progress Reports				
2. Home Visits				
3. Other contacts				

C. TASKS IN STUDY AND ACTIVITY ROOMS (HOURS SPENT)

	MON	TUES	WED	THURS	FRI
1. Study Room					
2. Activity Room					

D. WEEKLY PROJECT TASKS

	YES or NO
1. Assist Supervision of Week's Project Activity	
2. Assist Supervision of Week's Alternate Activity	
3. Attend Week's Project Meeting	

E. OTHER TASKS, ACTIVITIES, ETC. (DESCRIBE)

BUDDY-TUTOR PROJECT HILO INTERMEDIATE SCHOOL

PARENTAL PERMISSION

_____ has completed his contract for the week of _____ and has my permission to _____

_____

_____.

He/She will be returned to _____ at the completion of this activity.

_____ _____

PARENT OR GUARDIAN SIGNATURE DATE

BUDDY-TUTOR PROJECT HILO INTERMEDIATE SCHOOL

PARENTAL PERMISSION

_____ does not have my permission to participate in the project activity for the week of _____.

_____ _____

PARENT OR GUARDIAN SIGNATURE DATE

BUDDY-TUTOR CONTRACT

_____
Date

Part A. I, _____, will _____
student

_____

_____

_____

_____

_____.

_____
Student

Part B. When _____ completes the contract as
student
stated above in Part A., I will _____

_____

_____

_____.

_____
Buddy

Part C. When _____ completes the contract as
student
stated above in Part A., I will give _____
student
my permission to participate in the activity as noted above in Part B.

Should the contract not be completed successfully, I will deny _____ my permission to participate
student
in that activity.

_____
Parent's Signature

BUDDY-TUTOR PROJECT HILO INTERMEDIATE SCHOOL

STUDENT-BUDDY-PARENT CONTRACT

PART A. STUDENT PROVISION

I, _____, will come to school every day during the weeks of _____ and _____. For each day, I will do my: (1) 8:30 a.m. academic assignment at _____% accuracy;
(2) 9:30 a.m. academic assignment at _____% accuracy;
(3) 10:30 a.m. academic assignment at _____% accuracy.
I also agree to complete these assignments at the average accuracy level of _____% for the week of _____, and at the average accuracy level of _____% for the week of _____.

After I complete these assignments, I will be able to participate in the daily and weekly activities described in Part B. I understand that I must have my parents' or guardians' permission to participate in the weekly activities described in Part B, Section 2.

_____ _____
STUDENT SIGNATURE DATE

PART B. BUDDY PROVISION

SECTION 1: DAILY ACTIVITIES. _____ will be allowed to: (1) after completing the 8:30 a.m. assignment, spend time in the activity room until 9:30 a.m.;
(2) after completing the 9:30 a.m. assignment, spend time in the activity room until 10:30 a.m.;
(3) after completing the 10:30 a.m. assignment, spend time in the activity room until 11:30 a.m.

SECTION 2: WEEKLY ACTIVITIES. After _____ has completed all assignments at the average accuracy level of _____% for the week of _____, I will make arrangements for him/her to:_____
_____.
After he/she has completed all assignments at the average accuracy level of _____% for the week of _____, I will make arrangements for him/her to:_____
_____.

_____ _____
BUDDY SIGNATURE DATE

PART C. PARENT OR GUARDIAN PROVISION

When _____ successfully completes this contract as specified in Part A, I will give my permission for him/her to participate in the activities described in Part B, Section 2.

_____ _____
PARENT OR GUARDIAN SIGNATURE DATE

BUDDY-TUTOR PROJECT
CONTRACT RECORD FORM

BUDDY: _____ TARGET: _____
CONTRACT WEEK: _____
CONTRACTED AVERAGE ACCURACY LEVEL FOR WEEK: _____%
CONTRACTED DAILY ACCURACY LEVEL FOR WEEK: 8:30 TASK = _____%
9:30 TASK = _____%
10:30 TASK = _____%

	8:30 TASK	9:30 TASK	10:30 TASK
THURSDAY			
FRIDAY			
MONDAY			
TUESDAY			
WEDNESDAY			
TOTAL	(1)	(2)	(3)

* WEEK'S AVERAGE ACCURACY LEVEL = $\frac{\text{Total (1) + (2) + (3)}}{\text{Number of Entries}}$ = _____%

OVERALL SCHEDULE OF BUDDY-TUTOR PROJECT EVENTS

FIRST WEEK (June 3-7): Buddy Orientation (All Buddies to Attend)

1. June 3: Project meeting.
2. June 4: Meeting of all new buddies with Bill (Hilo College).
3. June 6 and 7: Assist Mercedes and Pat in setting up study and activities rooms.
4. During week: Review procedures and materials of token-contract system. Review forms to administer to targets (Child I-E Scale, Buddy System Questionnaire, Environmental-Influence Scale).

SECOND WEEK (June 10-14): Target Orientation (All Buddies to Attend)

1. June 10 (Monday)
   - 8:30-9:00: Explanation of project operation by Mercedes and Pat.
   - 9:00-11:30: All targets allowed to spend time in activity room. Targets individually taken out by buddies to be administered Child I-E Scale in study rooms.
   - 11:30: Project meeting to assign targets to buddies, review activities and procedures for rest of week, etc.
2. June 12 (Wednesday)
   - 8:30-9:00 Buddies to meet with group of assigned targets.
   - 9:00-11:30: All targets allowed to spend time in activity room. Targets individually taken out by buddies to develop first contract. Be sure to note exceptions regarding completion of forms on Thurs. & Fri.
3. June 13 (Thursday) and June 14 (Friday)
   Begin regular schedule of project operation with exception that targets to be taken out of schedule to be administered Buddy System Questionnaire and Environmental-Influence Scale by buddies. Be sure to make home visits to parents to discuss project operation and obtain signatures for first contract and permission for target to participate in week's activity on June 14.

THIRD-EIGHTH WEEK: Regular Schedule of Project Operation

1. Refer to Schedule of Buddy Task Performance.
2. Additional Notes on Contracting:
   a. Each contract will be for a 2-week period with payoffs each week. The contract will begin on Thursday and end on the following Wednesday, with the payoff two days later on Friday.
   b. Maintain frequent and regular monitoring of targets' performance. Evaluate each week's performance, determine outcome, inform target, visit parent (to report outcome and obtain signatures), and arrange for payoff. Note that each buddy is ultimately responsible for arranging delivery of contracted payoff for assigned targets.
   c. Three (3) two-week contracts will be developed for the following periods:
      First contract = June 13 to June 26
      Second contract = June 27 to July 10
      Third contract = July 11 to July 24

LAST WEEK: Evaluation and Wrap-Up (All Buddies to Attend)

1. July 25 to July 31: Regular schedule to be modified for posttesting targets on PIAT and Environmental-Influence Scale.
2. July 31: Pot Luck Dinner.

SCHEDULE OF BUDDY TASK PERFORMANCE

MONDAY

1. Assist Project Teacher or Activities Coordinator.
2. Check targets' performance on academic assignments.
3. Call parents to report on child's progress, week's activity, arrange home visit, etc.
4. Project meeting 12:00-2:00 p.m., Hilo Intermediate School - Submit Buddy Reports.

TUESDAY

1. Assist Project Teacher or Activities Coordinator.
2. Check targets' performance.

WEDNESDAY

1. Assist Project Teacher or Activities Coordinator.
2. Check targets' performance.
3. Review targets' completion of week's assignments: inform targets of outcome of contract.
   a. If success, target permitted to participate in week's activity with parental permission. Buddy to arrange for participation.
   b. If failure, target not allowed to participate in activity. Buddy to assess reasons for failure.
4. Write new 2-week contract, taking into consideration target performance on previous contract. Explain contract to and obtain signature from targets.
5. Home visit to parents of targets.
   a. Discuss contract outcome and obtain signature on Parental Permission form.
   b. Discuss new 2-week contract and obtain signature on Student-Buddy-Parent Contract form.

THURSDAY

1. Assist Project Teacher or Activities Coordinator.
2. Check targets' performance.
3. Inform Activities Coordinator on target participation in week's activity.
4. Submit Parental Permission forms to Activities Coordinator.

FRIDAY

1. Assist Project Teacher or Activities Coordinator.
2. Check targets' performance.
3. Assist supervision of week's project or alternate activity.

PARENT - S T U D E N T - TEACHER

CONTRACT

Buddy-Tutor Program, Hilo Intermediate School

I, _____, will do the following (A) during the
(Student's Signature)

two weeks of _____, and because I do this I will be allowed to do (B) as I've checked below.

A. _____ 1. I will have no unexcused absences from school.
_____ 2. I will come to all of my classes on time.
_____ 3. I will have no unexcused tardiness to school.
_____ 4. I will behave and will not be referred to the principal or counselor for bad behavior.
_____ 5. I will not bring any drugs to school, and nor will I take any.
_____ 6. I will not get into a fight with someone else.
_____ 7. I will sit still and quietly work with my partner.
_____ 8. I will complete my assigned tasks during these two weeks. These tasks are to: _____
_____
_____.

B. _____ 1. Leave the school campus for lunch.
_____ 2. Collect tokens each day for doing good work.
_____ 3. Go bowling or to a movie with my buddy.
_____ 4. Get one half hour of free time in class, to use phonograph, radio, etc.
_____ 5. Watch more TV at home. (Amount: _____.)
_____ 6. Stay up later at home. (Amount: _____.)
_____ 7. _____
_____ 8. _____

Signed: _____, _____, _____,
(Student) (Project Teacher) (Activity Leader)

_____, _____, _____,
(Principal) (Parent) (Classroom Teacher)

Certificate of Award

This Certifies That

_____

is awarded this certificate for PARTICIPATION
IN

BUDDY-TUTOR SUMMER PROJECT

_____

during the year 1974

Hilo Intermediate School

This honor is conferred this 30th day of JULY 1974

HILO INTERMEDIATE STUDENT ASSOCIATION '29

_____
Project Teacher

_____
Buddy

58

STATE OF HAWAII
DEPARTMENT OF EDUCATION

HILO INTERMEDIATE SCHOOL

587 Waianuenue Avenue
Telephone 935-1512
HILO, HAWAII 96720

ROBERT F. BEAN, *Principal*

May 29, 1974

Dear Mr. and Mrs.

We are happy to inform you that has been doing very well in the Buddy-Tutor Project. She is very conscientious, and tries very hard in her Math. She has mastered her two digit division, and on her Mastery tests, received a 96% and 100%. You might ask her to show you how to solve the problems

29/457 65/528 53/6492

Michelle is happy, and enthusiastic in the Buddy-Tutor Project. She has learned to ask for help if she does not understand how to do the problems. Right now Michelle is working at understanding word problems.

Sincerely,

Mercedes P. Manalili

Mercedes P. Manalili, Project Teacher

R F Bean

Robert F. Bean, Principal

Ann Borges

Ann Borges, Buddy

****

Would you like to tell us how you feel? You may, then sign and return this part.

_____
Parent's signature

SIGN-UP SHEET FOR SUPERVISION OF WEEK'S ACTIVITY

FRIDAY, JUNE 14		SCHEDULED		ALTERNATE
11:30-1:30 p.m.	1.		1.	
Awareness House Tour	2.		2.	
	3.		3.	
	4.			
FRIDAY, JUNE 21		SCHEDULED (CARS)		ALTERNATE
11:30-Open	1.		1.	
Akaka Falls or	2.		2.	
Volcano Picnic	3.		3.	
	4.			
FRIDAY, JUNE 28		SCHEDULED (CARS)		ALTERNATE
11:30-Open	1.		1.	
Waiakea Village	2.		2.	
Tour and Lunch	3.		3.	
	4.			
FRIDAY, JULY 5		SCHEDULED		ALTERNATE
11:30-3:30 p.m.	1.		1.	
Punaluu Picnic	2.		2.	
	3.		3.	
	4.			
FRIDAY, JULY 12		SCHEDULED (CARS)		ALTERNATE
11:30-Open	1.		1.	
Hilo Lanes	2.		2.	
Bowling	3.		3.	
	4.			
FRIDAY, JULY 19		SCHEDULED		ALTERNATE
7:00 a.m.-5:30 p.m.	1.		1.	
Waikoloa Horseback	2.		2.	
Riding and Picnic	3.		3.	
	4.			
FRIDAY, JULY 26		SCHEDULED		ALTERNATE
7:00 a.m.-7:00 p.m.	1.		1.	
Kona and Honaunau	2.		2.	
Picnic	3.		3.	
	4.			
WEDNESDAY, JULY 31				
Evening		ALL BUDDIES TO ATTEND		
Hilo Intermediate				
Pot Luck Dinner				

INSTRUCTIONS:
1. Sign up for three (3) Scheduled activities.
2. Sign up for two (2) Alternate activities.
3. For three of the Scheduled activities (June 21, June 28, and July 12), buddies who sign up should be able to provide transportation for the youngsters.
4. For July 31 activity, all buddies are to attend to close out the project.